



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket No: 081356-0253

In re patent application of

NAKASHIMA, NOBUTAKA *et al.*

Serial No.: 10/553,979

Filed: October 20, 2005

For: METHOD OF PRODUCING RECOMBINANT PROTEIN IN BACTERIUM BELONGING TO GENUS
RHODOCOCCUS

STATEMENT TO SUPPORT FILING AND SUBMISSION IN
ACCORDANCE WITH 37 C.F.R. §§ 1.821-1.825

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Mail Stop SEQUENCE

Sir:

In connection with a Sequence Listing submitted concurrently herewith, the undersigned hereby states that:

1. the submission, filed herewith in accordance with 37 C.F.R. § 1.821(g), does not include new matter;

2. the content of the electronically filed Sequence Listing is submitted in accordance with 37 C.F. § 1.821(e).

Respectfully submitted,

10 September 2008
Date

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Reg. No. 29,768

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4829485_1.TXT
SEQUENCE LISTING

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TAMURA, TOMOHIRO

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<140> 10/553,979

<141> 2005-10-20

<150> PCT/JP04/005585

<151> 2004-04-19

<150> JP 2003116280

<151> 2003-04-21

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<170> PatentIn Ver. 3.3

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
vector pTip-NH2 sequence

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<223> Description of Artificial Sequence: Synthetic
vector pTip-RC1 sequence

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<223> Description of Artificial Sequence: Synthetic
vector pTip-RC2 sequence

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<210> 100

<211> 5988

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
vector pNit-QT2 sequence

4829485_1.TXT

<400> 100

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<210> 101

<211> 6058

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
vector pNit-RT1 sequence

<400> 101

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<210> 102

<211> 6062

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
vector pNit-RT2 sequence

<400> 102

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<223> Description of Artificial Sequence: Synthetic
vector pNit-QC1 sequence

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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vector pNit-RC1 sequence

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[illegible]

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<223> Description of Artificial Sequence: Synthetic
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Gly Ser Lys Leu Arg Ser Arg Gly
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4829485_1.TXT

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gcgtggacgg cgtcagagaa gggagcgc atg ggc cat cac cat cac cat cac 174
Met Gly His His His His His His
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gcc atg gga att cta cgt agc ggc cgc gga tcc aag ctt aga tct cga 222
Ala Met Gly Ile Leu Arg Ser Gly Arg Gly Ser Lys Leu Arg Ser Arg
10 15 20
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cctgctacgc cgcctcagcg ggactctagt 425

<210> 115
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<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

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Arg Gly Ser Lys Leu Arg Ser Arg Gly
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<210> 116
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic nucleotide sequence

<400> 116
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<210> 117
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<212> DNA
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<223> Description of Artificial Sequence: Synthetic nucleotide sequence

<222> (151) .. (216)

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Gly Ser Lys Leu Arg Ser Arg Gly His His His His His His

10 15 20

cgcctcagcg ggactctagt 416

<213> Artificial Sequence

Met Gly Ile Leu Arg Ser Gly Arg Gly Ser Lys Leu Arg Ser Arg Gly
1 5 10 15

His His His His His His
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<213> Artificial Sequence

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<211> 81

<212> DNA

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<222> (3)..(68)

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gag cat cac cat cac cat cac tgaactagtc gac      81
Glu His His His His His His
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<210> 121

<211> 22

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 121

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Met Gly Ile Leu Arg Ser Gly Arg Gly Ser Lys Leu Arg Ser Leu Glu
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His His His His His His
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gag cat cac cat cac cat cac tgaactagtc gac      82
Glu His His His His His His
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<210> 123

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<212> PRT

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 123

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<210> 124

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic nucleotide sequence

<400> 124

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<210> 125

<211> 45

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic nucleotide sequence

<400> 125

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<210> 126

<211> 14

<212> PRT

<213> Rhodococcus erythropolis

<400> 126

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<210> 127

<211> 8

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<213> Rhodococcus erythropolis

<400> 127

Met Val Thr Met Thr Met Arg His
1 5

<210> 128

<211> 26

<212> PRT

<213> Rhodococcus erythropolis

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Gly Trp His Val His Val His Ala Leu Leu
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<210> 129

<211> 10

<212> PRT

<213> Rhodococcus erythropolis

<400> 129

Leu Ala Ala Tyr Leu Thr Lys Ile Ala Ser
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<210> 130

<211> 21

<212> PRT

<213> Rhodococcus erythropolis

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Trp Arg Glu Phe Glu Phe Gly Ser Met Gly Arg Arg Ala Ile Ala Trp
 1 5 10 15

Ser Arg Gly Leu Arg
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<212> PRT

<213> Arcanobacterium pyrogens

<400> 131

Gly Leu His Thr Cys Gly Ser Val Trp Ala Cys Pro Val Cys
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Met Leu Thr Leu Thr Gln Arg His
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<210> 133

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<213> Arcanobacterium pyrogens

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Gly Trp His Val His Ser His Val Leu Ile
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Ser Lys Gly Leu Arg
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 <213> Brevibacterium lactofermentum

<400> 136
 Met Phe Val Gly Thr Val Arg His
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<210> 137
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<400> 137
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<400> 138
 Met Ala Thr Tyr Leu Ala Lys Gly Met Ser
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<213> Brevibacterium lactofermentum

<400> 139

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Arg Gly Ala Lys
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<212> PRT

<213> Streptomyces phaeochromogenes

<400> 140

Gly Leu Val Arg Cys Gly Arg Ile Trp Phe Cys Pro Glu Cys
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<210> 141

<211> 8

<212> PRT

<213> Streptomyces phaeochromogenes

<400> 141

Leu Val Thr Phe Thr Ala Arg His
1 5

<210> 142

<211> 27

<212> PRT

<213> Streptomyces phaeochromogenes

<400> 142

Gly Tyr Ile Gly Met Val Arg Ala Ala Glu Val Thr Arg Ser Lys Lys
1 5 10 15

Asn Gly Tyr His Pro His Leu Asn Leu Leu Val
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<210> 143

<211> 10

<212> PRT

<213> Streptomyces phaeochromogenes

<400> 143

Leu Ile Glu Tyr Leu Thr Lys Asn Gln Asp
1 5 10

<210> 144

<211> 21

<212> PRT

<213> Streptomyces phaeochromogenes

<400> 144

Trp Ala Gln Tyr Glu Glu Ala Leu Ala Gly Arg Arg Ala Ile Glu Trp
1 5 10 15

Thr Arg Gly Leu Arg

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<210> 145
 <211> 14
 <212> PRT
 <213> Streptomyces lividans

<400> 145
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 1 5 10

<210> 146
 <211> 8
 <212> PRT
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<400> 146
 Leu Val Thr Phe Thr Ala Arg His
 1 5

<210> 147
 <211> 26
 <212> PRT
 <213> Streptomyces lividans

<400> 147
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 1 5 10 15
 Gly Trp His Pro His Ile His Ala Ile Val
 20 25

<210> 148
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 <212> PRT
 <213> Streptomyces lividans

<400> 148
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 1 5 10

<210> 149
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<400> 149
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 1 5 10 15
 Thr Arg Tyr Leu Arg
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<210> 150
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<400> 150
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<210> 153
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<213> Streptomyces nigrifaciens

<400> 153
Leu Ala Glu Tyr Ile Ala Lys Thr Gln Asp
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<210> 154
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<213> Streptomyces nigrifaciens

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Thr Arg Tyr Leu Arg
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<213> Rhodococcus erythropolis

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<210> 156
<211> 27

<212> DNA

<213> *Arcanobacterium pyrogens*

<400> 156

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<210> 157

<211> 32

<212> DNA

<213> *Brevibacterium lactofermentum*

<400> 157

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<210> 158

<211> 31

<212> DNA

<213> *Streptomyces phaeochromogenes*

<400> 158

ctggcaaaaa gggacgccta ggtaaagggt t 31

<210> 159

<211> 30

<212> DNA

<213> *Streptomyces lividans*

<400> 159

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<210> 160

<211> 32

<212> DNA

<213> *Streptomyces nigrifaciens*

<400> 160

gacccaaaac gtgtcgcgcc ttgggaaaga aa 32

<210> 161

<211> 270

<212> DNA

<213> *Rhodococcus erythropolis*

<400> 161

tgagggcatc	cccccgatac	ttgccgcttt	gaagctgggt	gtctctctgt	cagggctgcg	60
atagcaccgc	gtagcggctt	ggccttgaca	gagagacggc	ctgtttcatg	gttgggtctcg	120
gggggctgac	cgggcagata	gaaaaaggcc	ggccgatttg	gctgccgact	atTTTTgcag	180
gtaaacccat	ctcatgagca	tcaatgaacg	tcccgttgta	tcgcagcgcg	tgcagcttcg	240
gtagacgtcg	atggcgttgt	gatgggtgtg				270

<210> 162

<211> 170

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

nucleotide sequence

<400> 162
 tgtacatatc gaggcgggct cccacggccg cccgggctga gggagccgac ggcacgcggc 60
 ggctcacggc gtggcacgcg gaacgtccgg gcttgacac ctcgtcacgt gaggaggcag 120
 cgtggacggc gtctagaaat aattttgttt aactttaaga agaagatata 170

<210> 163
 <211> 95
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 nucleotide sequence

<220>
 <221> CDS
 <222> (3)..(92)

<400> 163
 cc atg ggc cac cat cac cat cac cat atg gga att cta cgt agc ggc 47
 Met Gly His His His His His His Met Gly Ile Leu Arg Ser Gly
 1 5 10 15
 cgc gga tcc aag ctt aga tct ctc gag cat cac cat cac cat cac tga 95
 Arg Gly Ser Lys Leu Arg Ser Leu Glu His His His His His His
 20 25 30

<210> 164
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 164
 Met Gly His His His His His His Met Gly Ile Leu Arg Ser Gly Arg
 1 5 10 15
 Gly Ser Lys Leu Arg Ser Leu Glu His His His His His His
 20 25 30

<210> 165
 <211> 99
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 nucleotide sequence

<220>
 <221> CDS
 <222> (4)..(96)

<400> 165
 cat atg ggc cat cac cat cac cat cac gcc atg gga att cta cgt agc 48
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Met Gly His His His His His His Ala Met Gly Ile Leu Arg Ser
 1 5 10 15

ggc cgc gga tcc aag ctt aga tct ctc gag cat cac cat cac cat cac 96
 Gly Arg Gly Ser Lys Leu Arg Ser Leu Glu His His His His His His
 20 25 30

tga 99

<210> 166

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 166

Met Gly His His His His His His Ala Met Gly Ile Leu Arg Ser Gly
 1 5 10 15

Arg Gly Ser Lys Leu Arg Ser Leu Glu His His His His His His
 20 25 30

<210> 167

<211> 197

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic nucleotide sequence

<400> 167

actagtcgac ccaccggcac ccgtgagccc ctcgctgcgg gtgccggtgc gagggactgc 60
 aacacgcgaa acctgcacaa acacacggag gttggaatga gcgccacgga cacacccgat 120
 accggcgccg ttccaccccg gttggtgacc accgctgggg cggtgacct gctacgccgc 180
 ctcagcggga ctctagt 197

<210> 168

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic 6xHis tag

<400> 168

His His His His His His
 1 5

<210> 169

<211> 147

<212> DNA

<213> Artificial Sequence

<220>

4829485_1.TXT

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 169

cgcccgggct gagggagccg acggcacgcg gcggctcacg gcgtggcacg cggaacgtcc 60
gggcttgacac ctcacgtcac gtgaggaggt ataatggacg gcgtctagaa ataattttgt 120
ttaactttaa gaaggagata taccatg 147

<210> 170

<211> 124

<212> DNA

<213> Rhodococcus erythropolis

<220>

<223> mutated TipA gene promoter

<400> 170

cgcccgggct gagggagccg acggcacgcg gcggctcacg gcgtggcacg cggaacgtcc 60
gggcttgacac ctcacgtcac gtgaggaggt ataatggacg gcgtcagaga agggagcggc 120
catg 124